

# **STUDI PENGARUH DERAJAT KEASAMAN ASAM SULFAT TERHADAP PERENGKAHAN PANAS DAN PENJENUHAN TRIGLISERIDA CPO DENGAN TWO STAGES ELECTROCHEMICAL THERMAL CRACKING REACTOR**

## **STUDY OF THE INFLUENCE THE ACIDITY LEVEL OF SULPHURIC ACID TO THERMAL CRACKING AND TRIGLYCERIDE SATURATION OF CRUDE PALM OIL BY USING TWO STAGES ELECTROCHEMICAL THERMAL CRACKING REACTOR**

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### **ABSTRACT**

Crude Palm Oil (CPO) was experienced with electrolyze by using two stages electrochemical thermal cracking reactor, zeolyte as catalyst, silver as cathode and cuprum as anode. In this research, we used electrolyte solution for 2 kinds of concentrate which was 40 and 60% of sulphuric acid ( $H_2SO_4$ ). It worked in 1 atm with electrolyze for 1 hour, heating till reaching temperature 80°C for 1 hr, fogging process for 1 hr, and heating without electrolyze nor fogging about 30 minutes. From lubricity analyze, this product is a fuel with high lubricity. The analyzer showing that cracking of triglyceride of crude palm oil has same characteristics with diesel.

*Keyword : Crude Palm Oil, Electrolyze, Electrochemical Thermal Cracking Reactor, Triglyceride*